



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,704	09/17/2003	Yoichi Nemugaki	242935US3	3973
22850	7590	10/24/2006	EXAMINER	
C. IRVIN MCCLELLAND OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				LAZORCIK, JASON L
ART UNIT		PAPER NUMBER		
				1731

DATE MAILED: 10/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/663,704	NEMUGAKI, YOICHI	
	Examiner	Art Unit	
	Jason L. Lazorcik	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 17 September 2003 and 18 November 2003.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 1-7 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 8-12 is/are rejected.
- 7) Claim(s) 13 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 17 September 2003 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 09/17/2003.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: 02/02/2004.

DETAILED ACTION

Preliminary Comments

It is here noted that the Examiner has implemented United States patent 6,722,160 B1 to Nemugaki et. al. which is a 371 National stage application of the Japanese international patent application PCT/JP00/03967 (published as WO 00/78685) as an English language equivalent. As such, any reference to US 6,722,160 is understood to carry the full weight of the priority dates associated with the parent PCT application. Further, all citations to the PCT application will be made to specific pages, figures, and line numbers from the United States patent.

Election/Restrictions

Applicant's election with traverse of Group II, claims 8-13, drawn to a process for air-cooling and tempering a glass sheet the reply filed on September 1, 2006 is acknowledged. The traversal is on the ground(s) that the restriction requirement has not established an undue search burden upon the Office. This is not found persuasive because as indicated in the restriction requirement, the claimed inventions have attained separate *classification status in the art..* As such, the search and examination of the entire application of both groups would necessitate divergent fields of search therefore constituting an undue burden upon the Office.

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

Claim 13 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The limitation set forth in the immediate claim wherein the sheet is used for "a window glass of automobiles" amounts to a statement of intended use and therefore provides no further limitation to the parent claim 8 drawn to the method of air-cooling and tempering said sheet.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites the limitation "the last glass sheet" in line 17. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 sets for the limitation wherein a plurality of dampers are connected via an Oldham's coupling". Since the interrelationship of said dampers and said coupling with the broader air cooling and tempering apparatus as set forth in claim 8 is not clearly set forth, the particular metes and bounds for which the applicant seeks patent protection under said limitation are rendered unclear and indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8-11 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Nemugaki (WO 00/78685 where US 6,722,160 B1 is applied as the English language translation).

With respect to Claim 8, Nemugaki teaches (see Claim 1) an “air-cooling/tempering method for air cooling and tempering a glass plate” comprising

- 1) “a transferring device” or conveying means
- 2) Providing “a plurality of air-blowing heads positioned along the transferring device which blow air to the upper and lower faces of the glass plates” which are held equivalent to the plurality of upper and lower blowing methods. It is understood that since the blowing of air can be “started and stopped, the apparatus inherently incorporates an air-supply which is capable of controlling the “blow/stop” operation of cooling air to each of the blowing members

- 3) The process comprises “stopping the blowing of air in the air-blowing area” which is held equivalent to the claimed step of “stopping the cooling air from all of the upper and lower blowing members in the cooling area in an initial state”,

- 4) A second step of "starting the blowing of air when "an entirety of the glass plate is transferred into (the apparatus" which is held equivalent to the claimed step of "flowing cooling air from all of the upper and lower blowing members when the substantially whole of a conveyed glass sheet is entered in the cooling area,
- 5) And a further step of "stopping the blowing" and as set forth in the reference claim 3 stopping said blowing in "a sequential order of areas though which the glass plate is passed" which is held equivalent to the claimed process of sequentially stopping the cooing air blown to the conveyance position of the glass sheet after the last glass sheet in the cooling area is passed.

Regarding claim 9, the reference indicates that "the air=blowing heads are each disposed between the adjacent tempering rollers ...and configured to move vertically" (column 22, lines35-37). Where the heads are raised and lowered in accordance with the conveyance of the glass sheet and along the direction of conveyance thereof, the disclosure is held equivalent to the claimed process wherein an upper and/or lower blowing member comprises an air-nozzle "swingable" in the conveying direction of a glass sheet.

Regarding claims 10 and 11, the immediate reference clearly indicates that the "transferring device comprises a plurality of tempering rollers" (Column 22, Line 22-23) and that said rollers "move vertically with the transfer of the glass plate" (Column 22, Lines 30-32).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nemugaki (WO 00/78685 or US 6,722,160 B1) as applied under 35 USC 102(b) to Claim 8 above in further view of Inoue (US 5,942,702).

Nemugaki teaches that “Next, a preferred sequence in the air-cooling/tempering method of the present invention will be described. As shown in FIG. 8, dampers 250A, 250B, . . . , 252A, 252B, . . . are respectively provided at air supplying ports 130A, 130B, . . . , 150A, 150B, . . . formed in air-blowing boxes 30, 32. The dampers 250A, 250B, 252A, 252B, . . . are controlled independently to be opened and closed by means of a controller (not shown) respectively. Air is supplied to each of the air-blowing heads 24A, 24B, . . . , 26A, 26B, . . . by opening the dampers 250A, 250B, . . . , 252A, 252B, . . . , and the supply of air is stopped by closing the dampers. Thus, the air blowing area of

each of the air blowing heads 24A, 24B, . . . , 26A, 26B, . . . is divided." (Column 14, Line 66 to Column 15, line 10) Nemugaki fails to explicitly set forth the limitation mechanical interrelationship between the dampers is comprised of an Oldham's coupling. Inoue teaches that an Oldham's coupling can be utilized to account "take up misalignment between two mechanical components and in the instant case between the rotational axis of a board and the rotational axis of a rotational damper" (See abstract). It would have therefore been obvious to one of ordinary skill in the art at the time of the invention to utilize an Oldham's coupling as the interconnect between consecutive damping elements in order to account for minor mechanical misalignments of the individual elements. This would have been an obvious modification to the Nemugaki apparatus for one seeking to minimize wear on the apparatus due to misaligned components.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to

be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 8 through 11 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 3 of U.S. Patent No. 6,722,160. Although the conflicting claims are not identical, they are not patentably distinct from each other because the combined elements of Claims 1 and 3 are render obvious all of the matter set forth in the identified claims according to the rejection of said claims as set forth under 35 USC 102(b) above.

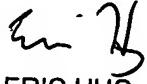
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason L. Lazorcik whose telephone number is (571) 272-2217. The examiner can normally be reached on Monday through Friday 8:30 am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JLL


ERIC HUG
PRIMARY EXAMINER